

**ABSTRACT OF THE DISCLOSURE**

A procedure and a data communication system in which a service provider provides to a remote user of a service a set of expendable passwords for use by the user in accessing the service via a telecommunication and/or data network. The user's terminal device is provided with means for automatically transmitting a password at log-on to the service, and a server to which the terminal device sets up a connection includes means for identifying the password and for allowing or denying access to the service on the basis of the supplied password. The terminal device further includes means for storing a set of passwords and for selecting, at log-on to a predetermined service, the correct password from the stored set of passwords for automatic addition of the password to a connection setup signal transmitted from the terminal device to the server.